Assessment of Professionalism and Ethics
Institutional Student Learning Outcome #3
Report to the Campus
2009-10

Prepared
By
The Executive Committee of the Assessment Commission

May 27, 2010
Contents

Executive Summary..........................................................................................................................1

Definition and performance criteria for professionalism and ethics.............................................2
Focus of assessments ...................................................................................................................2

Professionalism
Description of assessment ...........................................................................................................2
Data scoring .................................................................................................................................2
Data collection ............................................................................................................................2
Data elements ..............................................................................................................................2
Assessment results ......................................................................................................................3
  Overall results for all programs ..........................................................................................3
  Results by major .....................................................................................................................5

Ethics
Description of assessment ..........................................................................................................6
Data scoring .................................................................................................................................6
Data collection ............................................................................................................................6
Data elements ..............................................................................................................................6
Assessment results ......................................................................................................................7
  Overall results for all programs ..........................................................................................7
  Results by major .....................................................................................................................7

Indirect assessment from Application to Graduate .....................................................................9
Assessment reporting ................................................................................................................9
Documentation .............................................................................................................................9

Tables
  1: Professionalism—% of seniors who met/exceeded faculty expectations, all programs ........3
  2: Professionalism—% of seniors who met/exceeded faculty expectations, by major ..........5
  3: Ethics—Overall proficiency levels, all programs ...............................................................7
  4: Ethics—Proficiency by major ...........................................................................................8

Appendices
  A: Ethics Homework Assignment ............................................................................................10
  B: Ethics Rubric ......................................................................................................................11
Executive Summary
During the 2009-10 academic year, the OIT Assessment Commission conducted an assessment of professionalism and ethics. The assessment was based on three performance criteria:

Students will be able to:

1. Evaluate the ethical issues related to a problem in the discipline.
2. Demonstrate knowledge of the professional code of ethics in their discipline.
3. Demonstrate professional behavior in the academic environment.

OIT does not currently have general education requirements in professionalism or ethics, and these topics are normally covered within the major. Thus, both assessment activities focused on student work at the program level. Concerted efforts were made, however, to ensure that similar procedures and materials were used across the institution. Each of the programs that participated in this institutional assessment has also used the data for programmatic assessment and thus will work with any specific weaknesses at the program level.

Professionalism

The assessment of professionalism was based on faculty evaluations of graduating seniors in each program, using 12 professional behavioral components that were developed by the Assessment Commission and vetted broadly across the institution.

The Executive Committee found the results for all programs to be quite acceptable overall. They also felt that the results by clustered majors were generally acceptable overall. The committee did not identify any specific weaknesses requiring further action at the institutional level.

Ethics

The assessment of ethics was based on a rubric-scored ethics homework assignment in an upper division course in the major. Faculty gave students an ethics assignment that had been developed by the Assessment Commission and vetted broadly across the institution. The customized assignment included 1) questions about the code of ethics in the major and 2) a major-related, multi-dimensional ethics scenario that students analyzed using a set of questions.

The Executive Committee found the results for all programs to be generally acceptable overall. They also felt that the results by clustered majors were generally acceptable overall. The committee did not identify any specific weaknesses requiring further action at the institutional level.
Definition and performance criteria for professionalism and ethics
The Executive Committee of the Assessment Commission approved the following expectations and performance criteria for professionalism and ethics:

ISLO 3: OIT students will demonstrate an understanding of professionalism and ethical practice.

Students in training for professional life need a strong sense of professionalism and an understanding of ethical standards.

Expectation: Graduates should know and conform to the ethical and professional standards of their communities and professions. These expectations may be met through specific training in the ethics of student’s profession (major courses) and through examination of human behavior in coursework outside the major.

Criteria for Assessment: Students will be able to

1. Evaluate the ethical issues related to a problem in the discipline.
2. Demonstrate knowledge of the professional code of ethics in their discipline.
3. Demonstrate professional behavior in the academic environment.

Focus of assessments
The assessment focused on evaluation of student learning at the program level, as OIT does not currently have general education requirements directly related to professionalism or ethics.

Professionalism

Description of assessment
The assessment coordinators, in conjunction with program faculty, evaluated graduating seniors in each program, using 12 professional behavioral components that were developed by the Assessment Commission and vetted broadly across the institution.

Data scoring
The faculty used a rating scale from “0” (does not meet faculty expectations) to “2” (exceeds faculty expectations). In cases where a group of faculty felt they could not rate a criterion for a certain student, the coordinator left the data cell blank.

Data collection
Score sheets from all participating programs were submitted to the Director of Assessment during the spring 2010 term and compiled for further analysis.

Data elements
The data elements collected in the professionalism assessment process included:

- Student ID
- Student last and first name
- Twelve scores, one for each professional behavioral component
Assessment results for professionalism
The Executive Committee of the Assessment Commission reviewed the overall results of this assessment.

Overall results for all programs
As described above, the faculty rated the professionalism of graduating seniors using 12 performance criteria. A broad sample of OIT programs was included in the assessment. There were 372 seniors involved. The percentage of students who met or exceeded faculty expectations for each criterion is shown in Table 1.

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Meets Faculty Expectations</th>
<th>Exceeds Faculty Expectations</th>
<th>Total for Meets or Exceeds Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performs work in a timely manner</td>
<td>53.4%</td>
<td>36.4%</td>
<td>89.8%</td>
</tr>
<tr>
<td>Performs assigned tasks according to course expectations</td>
<td>54.6%</td>
<td>39.8%</td>
<td>94.4%</td>
</tr>
<tr>
<td>Work products completed in a professional manner</td>
<td>52.3%</td>
<td>42.3%</td>
<td>94.6%</td>
</tr>
<tr>
<td>Accepts feedback appropriately</td>
<td>44.4%</td>
<td>48.4%</td>
<td>92.7%</td>
</tr>
<tr>
<td>Accepts and carries out tasks with positive attitude</td>
<td>43.5%</td>
<td>47.8%</td>
<td>91.4%</td>
</tr>
<tr>
<td>Arrives on time or gives appropriate notification</td>
<td>54.0%</td>
<td>39.1%</td>
<td>93.1%</td>
</tr>
<tr>
<td>Attends classes/meetings or gives appropriate notification</td>
<td>49.2%</td>
<td>43.9%</td>
<td>93.1%</td>
</tr>
<tr>
<td>Follows OIT Student Conduct Code</td>
<td>50.7%</td>
<td>46.6%</td>
<td>97.3%</td>
</tr>
<tr>
<td>Interacts appropriately with others</td>
<td>49.2%</td>
<td>44.5%</td>
<td>93.6%</td>
</tr>
<tr>
<td>Follows classroom policies and procedures</td>
<td>64.8%</td>
<td>32.5%</td>
<td>97.3%</td>
</tr>
<tr>
<td>Demonstrates effort and hard work</td>
<td>43.0%</td>
<td>50.3%</td>
<td>93.3%</td>
</tr>
<tr>
<td>Appropriate professional appearance</td>
<td>52.1%</td>
<td>45.1%</td>
<td>97.2%</td>
</tr>
</tbody>
</table>

Table 1. Percentage of seniors who met or exceeded faculty expectations, all programs
The Executive Committee felt that these results were quite acceptable overall. They also noted that:

- Because faculty could leave certain data cells blank in the assessment, the percentages in Table 1 represent those students who were rated for a particular criterion, rather than all the students involved in the assessment.

- Although the assessment was preceded by a campus-wide discussion on the criteria for professionalism, the assessment activity generated further discussion within departments about how professionalism is defined, how department members individually differ on the meaning of certain criteria, and what we want to teach our students about this learning outcome.

- The students involved in the assessment are all graduating seniors, so the assessment does not include students who have left the institution, possibly due to the inability to demonstrate some of the behaviors involved in the assessment, including the ability to follow the OIT Student Conduct Code. Therefore, the committee expected to see high ratings for the students who have been able to complete all requirements for graduation—both behavioral and academic.

- Some faculty found it difficult to differentiate between the ratings of “meets faculty expectations” and “exceeds faculty expectations.” For example, the faculty wondered how one might rate a student as exceeding expectations for attendance or following the student conduct code.
Results by major

The faculty ratings of graduating seniors were also analyzed by major. Because of small sample sizes for each major, students were clustered into four categories of majors for this analysis—arts & sciences, engineering, health, and management. The percentage of seniors, by clustered majors, who met or exceeded faculty expectations is shown in Table 2.

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Arts &amp; Sciences n=55</th>
<th>Engineering n=103</th>
<th>Health n=170</th>
<th>Management n=44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performs work in a timely manner</td>
<td>94.5%</td>
<td>87.4%</td>
<td>91.1%</td>
<td>84.1%</td>
</tr>
<tr>
<td>Performs assigned tasks according to course expectations</td>
<td>98.2%</td>
<td>95.1%</td>
<td>92.9%</td>
<td>93.2%</td>
</tr>
<tr>
<td>Work products completed in a professional manner</td>
<td>98.2%</td>
<td>93.2%</td>
<td>94.0%</td>
<td>95.5%</td>
</tr>
<tr>
<td>Accepts feedback appropriately</td>
<td>96.4%</td>
<td>91.3%</td>
<td>91.2%</td>
<td>97.7%</td>
</tr>
<tr>
<td>Accepts and carries out tasks with positive attitude</td>
<td>94.5%</td>
<td>89.3%</td>
<td>91.8%</td>
<td>90.9%</td>
</tr>
<tr>
<td>Arrives on time or gives appropriate notification</td>
<td>92.7%</td>
<td>93.2%</td>
<td>93.2%</td>
<td>93.2%</td>
</tr>
<tr>
<td>Attends classes/gives appropriate notification</td>
<td>96.4%</td>
<td>91.3%</td>
<td>94.6%</td>
<td>86.8%</td>
</tr>
<tr>
<td>Follows OIT Student Conduct Code</td>
<td>98.2%</td>
<td>95.1%</td>
<td>97.6%</td>
<td>100%</td>
</tr>
<tr>
<td>Interacts appropriately with others</td>
<td>97.9%</td>
<td>92.2%</td>
<td>92.9%</td>
<td>95.5%</td>
</tr>
<tr>
<td>Follows classroom policies and procedures</td>
<td>98.2%</td>
<td>95.1%</td>
<td>98.8%</td>
<td>95.5%</td>
</tr>
<tr>
<td>Demonstrates effort and hard work</td>
<td>98.2%</td>
<td>88.3%</td>
<td>95.9%</td>
<td>88.6%</td>
</tr>
<tr>
<td>Appropriate professional appearance</td>
<td>100%</td>
<td>95.3%</td>
<td>97.3%</td>
<td>97.1%</td>
</tr>
</tbody>
</table>

Table 2. Percentage of seniors who met or exceeded faculty expectations, by clustered majors

The Executive Committee found these results to be consistent with the overall results in Table 1 and to be quite acceptable.
Ethics

Description of assessment
In an upper division course in the major, faculty gave students an ethics homework assignment (Appendix A) that had been developed by the Assessment Commission and vetted broadly across the institution. The assignment included 1) questions about the code of ethics in the major and 2) a major-related, multi-dimensional ethics scenario that students analyzed using a set of questions.

Prior to the assessment, the Director of Assessment asked each program involved to submit the ethics scenario that would be included in the homework assignment. These scenarios were reviewed to ensure that they were multi-dimensional, related to the student’s major, and not overly simple or complex.

An ethics rubric (Appendix B) was also provided to both students and faculty along with the assignment. This rubric was developed by the Executive Committee of the Assessment Commission in conjunction with an OIT faculty member who teaches ethics. The rubric was approved for use by the campus in April 2009.

Data scoring
To encourage motivation to perform well on the ethics assignment, the student work was graded and counted in the overall course grade. In addition to grading the assignments, each instructor scored the student assignments for assessment purposes, using the ethics rubric and a score sheet provided by the Assessment Commission. The instructors used a proficiency scale from “1” (limited or no proficiency) to “4” (high proficiency) for each of the four performance criteria on the rubric.

Data collection
Data collection occurred during the fall 2009 term, with a broad sample of OIT programs participating in the assessment. The aggregated data for all courses were then submitted to the Director of Institutional Research for analysis.

Data elements
The data elements collected in the ethics assessment process included:

- Student ID
- Student last and first name
- Course Reference Number (CRN)
- Subject, course, and section number (e.g., BIO 102-01)
- Three scores, one for each code of ethics provision, using the first performance criteria on the ethics rubric
- Four scores for the ethics scenario, one for each performance criteria on the ethics rubric.

In addition, the Director of Institutional Research linked the above data elements to the student’s major.
Assessment results for Ethics

Overall results for all programs
The Executive Committee of the Assessment Commission reviewed the overall results of this assessment. Results for students demonstrating proficiency or high proficiency for all courses combined are shown in Table 3. There were 382 students involved in this assessment.

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>% Proficient</th>
<th>% Highly Proficient</th>
<th>Total % Proficient or Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of professional ethics code</td>
<td>-</td>
<td>-</td>
<td>88.7</td>
</tr>
<tr>
<td>Identifies ethical issues in scenario using code of ethics</td>
<td>25.6</td>
<td>60.4</td>
<td>86.0</td>
</tr>
<tr>
<td>Describes parties involved and points of view</td>
<td>29.1</td>
<td>52.9</td>
<td>82.0</td>
</tr>
<tr>
<td>Describes &amp; analyzes alternative approaches</td>
<td>29.0</td>
<td>48.8</td>
<td>77.8</td>
</tr>
<tr>
<td>Supports an approach, describing benefits &amp; risks</td>
<td>27.3</td>
<td>56.2</td>
<td>83.5</td>
</tr>
</tbody>
</table>

Table 3. Overall proficiency levels, all programs

The Executive Committee found these results to be generally acceptable overall. They did not identify any specific weaknesses that require further action at the institutional level.

Results by major
Because of small sample sizes in many programs, students were clustered in four major categories for this analysis, including arts and sciences, engineering, health, and management. The percentage of students performing at proficiency or high proficiency by major is shown in Table 4.
<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Arts &amp; Sciences n=35</th>
<th>Engineering n=149</th>
<th>Health n=190</th>
<th>Management n=5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of professional ethics code</td>
<td>58.3%</td>
<td>87.4%</td>
<td>95.8%</td>
<td>80%</td>
</tr>
<tr>
<td>Identifies ethical issues in scenario using code of ethics</td>
<td>62.9%</td>
<td>85.3%</td>
<td>90.5%</td>
<td>100%</td>
</tr>
<tr>
<td>Describes parties involved and points of view</td>
<td>70.6%</td>
<td>81.2%</td>
<td>84.2%</td>
<td>100%</td>
</tr>
<tr>
<td>Describes &amp; analyzes alternative approaches</td>
<td>77.2%</td>
<td>71.8%</td>
<td>82.7%</td>
<td>80.0%</td>
</tr>
<tr>
<td>Supports an approach, describing benefits &amp; risks</td>
<td>91.2%</td>
<td>73.0%</td>
<td>90.6%</td>
<td>80.0%</td>
</tr>
</tbody>
</table>

Table 4. Proficiency by major (percentage at proficiency or high proficiency)

In reviewing the data by major, the Executive Committee noted possible weaknesses in the arts & sciences category. Further investigation revealed that the lower scores could be attributed to students in the Applied Psychology major. The psychology faculty reported that there are several codes of ethics involved in the program and that a number of students did not use the specified code for the assignment as instructed, which resulted in lower proficiency ratings in several areas. The faculty planned to repeat the assessment later in the year to ensure that their students have acceptable proficiency in ethics.

The committee also noted the small number of management majors included in the assessment. This was primarily a timing issue, in that the data collection occurred in the fall term, while preferred management courses for this assessment are generally offered later in the year. The course selected in the fall term is required in the major, but it is offered every term and is open to all OIT students.

The committee felt that the results by major were also generally acceptable overall, and did not identify specific weakness requiring further action at the institutional level. As noted above, OIT does not currently have general education requirements in professionalism or ethics, and these topics are normally covered within the major. Each of the programs that participated in this institutional assessment has also used the data for programmatic assessment and thus will work with any specific weaknesses at the program level.
Indirect assessment from Application to Graduate
The Executive Committee collected indirect assessment information from graduating seniors on their professionalism and ethics learning, using a survey attached to the Application to Graduate. The survey asked students to rate their level of learning on OIT’s ISLOs using a five-point scale (1 being “none” and 5 being “exceptional”). The seniors rated their learning in professionalism at 4.2 and ethics at 4.1, or “substantial” in both cases.

Assessment Reporting
The Director of Assessment, along with the Executive Committee of the Assessment Commission, will report the results of this assessment to the campus by email to the faculty list serve, by posting the final report on the assessment web site, and by a convocation presentation to the faculty.

Documentation
The Assessment Office will retain the final report and documentation of this assessment indefinitely.
Appendix A

Ethics Homework Assignment

For this assignment, please use the [name of program code] code of ethics.

1) List three provisions in the professional ethics code that you think are very important. For each provision, explain why you have selected it as important. Give an example of how this provision might be applied in a professional situation.

Provision 1:
   a. List provision
   b. Reason for importance
   c. Applied example

Provision 2:
   a. List provision
   b. Reason for importance
   c. Applied example

Provision 3:
   a. List provision
   b. Reason for importance
   c. Applied example

2) Please read the ethics scenario described below, and answer the questions which follow it. The attached rubric (performance chart) will be used to evaluate your proficiency on this assignment.

   [program scenario]

1) Using your professional code of ethics, describe the ethical issue(s).

2) Describe the parties who are or should be involved in the issue(s) and discuss their point(s) of view.

3) Describe and analyze possible/alternative approaches to the issue(s).

4) Choose one of the approaches that you think is best and explain the benefits and risks.
## OIT Ethics Rubric

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Limited or No Proficiency (1)</th>
<th>Some Proficiency (2)</th>
<th>Proficiency (3)</th>
<th>High Proficiency (4)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Using code of ethics, describes ethical issue(s)</td>
<td>Has a vague idea of what the issue is and is uncertain how the code of ethics applies.</td>
<td>Describes the issue(s) using concepts from code of ethics, but important elements may be missing or misunderstood.</td>
<td>Describes the issue(s) using basic concepts from code of ethics.</td>
<td>Describes the issue(s) in detail, demonstrating full understanding of relevant code of ethics provisions and how they relate to the issue(s).</td>
<td></td>
</tr>
<tr>
<td>2. Describes parties involved and discusses their points of view.</td>
<td>Is unsure who should be involved in the issue and/or does not reflect on their viewpoints.</td>
<td>Describes some of the parties and their viewpoints, but important elements are missing or misunderstood.</td>
<td>Describes who should be involved in the issue(s) and discusses the viewpoints of the parties at a basic level.</td>
<td>Describes who should be involved in the issue(s) and thoroughly discusses their viewpoints.</td>
<td></td>
</tr>
<tr>
<td>3. Describes and analyzes possible/alternative approaches</td>
<td>Is unable to describe or analyze alternatives or consider the effect on parties involved.</td>
<td>Describes and analyzes only one alternative and its effect on parties involved, but important elements are missing or misunderstood.</td>
<td>Describes and analyzes at least two alternatives and their effects on parties involved.</td>
<td>Describes and analyzes a number of alternative approaches and thoroughly considers the interests and concerns of all parties involved.</td>
<td></td>
</tr>
<tr>
<td>4. Chooses an approach and explains the benefits and risks.</td>
<td>Has difficulty choosing an approach or stating benefits and risks.</td>
<td>Chooses an approach and explains benefits and risks, but important elements are missing or misunderstood.</td>
<td>Chooses an approach and explains basic benefits and risks.</td>
<td>Chooses an approach and thoughtfully and thoroughly explains benefits and risks.</td>
<td></td>
</tr>
</tbody>
</table>